

## LINE DRIVER WITH POWER DOWN LOOPBACK PROTECTION

### ABSTRACT OF THE DISCLOSURE

A line driver selectively drives one of two transmission lines. The line driver includes a differential amplifier connected to first and second differential switches. The first differential switch is connected between an output of the differential amplifier and a first of two transmission lines. The second differential switch is connected to the output of the differential amplifier and to the second of two transmission lines. The first and second differential switches are controlled by respective first and second control signals. The output of the differential amplifier is connected to either the first or the second transmission line in response to the first and second control signals. The differential switches include loopback protection to prevent an incoming signal from passing from one transmission line to another during power down mode.